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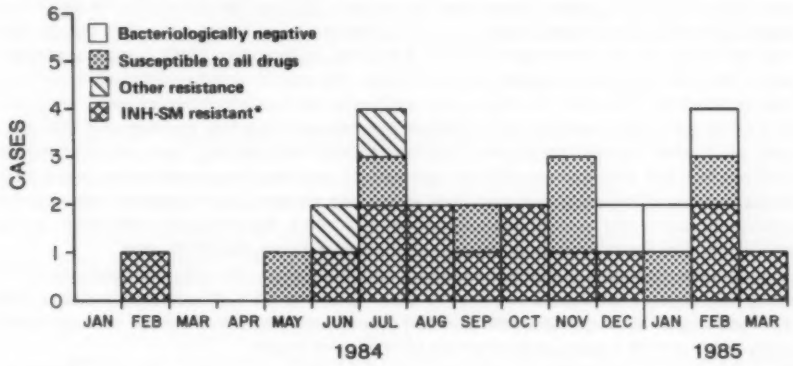
Epidemiologic Notes and Reports

Drug-Resistant Tuberculosis among the Homeless — Boston

In the period February 1984-March 1985, 26 confirmed cases of tuberculosis (TB) were reported among homeless people in Boston (Figure 1). All 26 cases have been associated with three large shelters. The estimated total population of homeless people in Boston is 6,000. Nineteen of the 26 cases were counted in 1984; this represents an incidence of 316.7 per 100,000, a greater than sixfold increase over the 1983 case rate of approximately 50.0/100,000. By comparison, the TB case rate for the rest of Boston in 1984 was 19.0/100,000, and the rate for Massachusetts excluding Boston was 4.8/100,000.

The outbreak was recognized because of reports among the homeless of a number of TB cases due to multiresistant organisms. As a result of this recognition, a screening program using Mantoux tuberculin skin tests, chest roentgenograms, and sputum examinations was

FIGURE 1. Reported tuberculosis cases among homeless persons, by month of report — Boston, Massachusetts, 1984-1985



*Isoniazid and streptomycin resistant.

Drug-Resistant Tuberculosis — Continued

implemented in November 1984. The program was carried out during a 4-night period in Boston's three largest shelters—those associated with the present outbreak. An average of 754 persons stayed at the three shelters on each screening night; all who agreed were screened. Chest x-rays were obtained for 438 persons; sputum was obtained from 274 for microscopic examination and culture. Skin tests were done on 350 people; 185 (52.9%) returned for reading, and of these, 34 (18.4%) had a 10-mm or larger reaction. As a result of the screening, five of the 26 TB cases were detected.

Other case-finding/control measures have included educational outreach efforts for the staffs of all Boston shelters, with an emphasis on rapid medical referral of clients presenting with a clinical picture suggesting TB. Two of the 26 individuals with TB were identified by this method after the screening in November.

Of the 26 TB patients, one is hospitalized, two have died, one has moved out of the state, and 22 are under outpatient treatment. Thirteen of these 22 are on directly observed therapy (drug ingestion observed by a health-care provider).

To date, sputum cultures from 23 of the 26 homeless patients have been bacteriologically confirmed as containing *Mycobacterium tuberculosis*. Fourteen (60.9%) of the 23 patients had organisms that were resistant to both isoniazid (INH) and streptomycin (SM); all 14 of these persons had spent time at the same shelter. One additional patient had organisms resistant to INH only, and another had organisms resistant to ethambutol (EMB) only.

Isolates from 21 of the 23 bacteriologically proven cases among the homeless and 13 control cultures from Boston residents not known to be associated with the outbreak have been phage typed at CDC. Thirteen isolates from the homeless were phage type 8 (7,9,12,13,14,15). Eleven of these were resistant to INH and SM, and one was resistant to EMB; one was susceptible to all drugs tested. Only one of the 13 control cultures was resistant to INH and SM and of the outbreak phage type. The individual from whom this culture was obtained denies any association with the homeless population.

Two individuals are suspected sources for the other cases with INH- and SM-resistant bacilli of the outbreak phage type. One, diagnosed in December 1983, was a 33-year-old man with a history of alcohol abuse who frequented a 350-bed Boston shelter. He had had a significant tuberculin skin-test reaction in 1973. He had twice begun preventive therapy but had not continued for more than a total of 2 months. In December 1983, a chest roentgenogram revealed extensive bilateral cavitary disease, and sputum smears contained many acid-fast bacilli (AFB). A second possible source, a 57-year-old man with schizophrenia, had a history of TB previously treated in 1980. Sputum cultures were negative; the diagnosis was clinically established. He was hospitalized and treated with multiple drug regimens that initially included INH, SM, and rifampin (RIF). He completed 2 months of inpatient therapy, and a total of 14 months of biweekly and then daily supervised therapy as an outpatient. He showed roentgenographic and clinical improvement. In July 1984, he presented with cough and a new infiltrate on his chest roentgenogram; sputum smears contained many AFB.

A voluntary program of active surveillance for clients and staff using skin testing alone is being introduced in all Boston shelters; to date, 13 of the 84 staff members tested at the 350-bed shelter have had tuberculin skin-test conversions. Preventive therapy with either RIF alone or INH and RIF is being recommended for these individuals.

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Drug-Resistant Tuberculosis — Continued

Editorial Note: High rates of TB in homeless populations have been noted previously (*1*), although a large outbreak such as the one reported here has not been previously documented. A high incidence of disease in this population is not unexpected because TB case rates are higher in lower socioeconomic groups (*2*). Furthermore, stress, alcoholism, drug addiction, and low body weight, which are probably more common among the homeless, have been reported to increase the risk of TB (*3-6*). While shelters for the homeless are vital, this outbreak points out the potential danger of transmission of TB when large numbers of homeless persons come together.

Outbreaks of TB can be difficult to detect because of the relatively long and variable incubation period of the disease. In this outbreak the drug-resistance patterns of tubercle bacilli served as a marker for the recognition of the outbreak. If an outbreak is suspected among patients with drug-susceptible organisms, phage typing of cultures may be helpful.

Screening and follow-up is difficult in a transient population. The use of incentives, such as food and food vouchers, has been reported to enhance compliance with screening and drug therapy (*7,8*). Shelter employees should learn the signs and symptoms of TB and refer shelter clients with these signs and symptoms for an examination. For those with TB, outpatient treatment using directly observed therapy on a daily or twice weekly basis to ensure compliance is likely to be more cost effective than long-term hospitalization. Directly observed therapy for noncompliant and potentially noncompliant patients is important to prevent treatment failure, perhaps with the emergence of resistance to additional drugs, and to prevent continued transmission of infection.

Transmission of INH-resistant organisms to contacts presents a difficult problem with regard to preventive therapy. The only drug of proven value in preventing tuberculosis is INH. Because of the high probability that shelter employees with tuberculin-skin-test conversions were infected with INH-resistant organisms, preventive therapy with a regimen including RIF was used. Although the efficacy of preventive treatment with RIF has not been demonstrated in controlled trials, the results of a survey of TB experts to determine the choice of preventive treatment for INH-resistant TB infection support the use of RIF (*9*).

Staff of shelters for the homeless should receive a tuberculin skin test upon employment and every 6-12 months thereafter. Skin-test converters should be considered for preventive therapy according to current guidelines (*10*).

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Current Trends

Update: Paint, Cadmium, and Monohalomethanes in the Workplace

The National Institute for Occupational Safety and Health (NIOSH) periodically issues documents to transmit new information or to update existing information on specific chemical substances, physical agents, or other hazards found in the workplace. Three such documents, recently issued, are summarized below. Each is available for distribution as indicated.

Manufacture of Paint and Allied Coating Products: In September 1984, NIOSH published the criteria document,* *Recommendations for Control of Occupational Safety and Health Hazards...Manufacture of Paint and Allied Coating Products.* This document addresses the health and safety hazards associated with the manufacture of products having the broad functions of surface protection or decoration. Examples are paints, varnishes, lacquers, and stains and related products such as putties and paint and varnish removers. Facilities that manufacture paint and allied coating products are included in the Standard Industrial Classification (SIC) code 2851, Paint, Varnishes, Lacquers, Enamels, and Allied Products.

NIOSH estimates that the industry producing paint and allied coating products in the United States employs about 61,500 workers in 1,700 plants. Work in this industry involves assembling materials, mixing, dispersing, thinning and adjusting, filling, and warehousing; other related activities include handling of materials, laboratory work, and shipping.

Because of the great diversity of surfaces requiring treatment, thousands of different raw materials are used in the manufacture of approximately 20,000 different coating products. Workers involved in the manufacture of paint and allied coating products are potentially exposed to a variety of chemicals used as pigments and extenders, solvents, film-forming components, and additives.

The document presents data from the Bureau of Labor Statistics (BLS) to compare average incidence rates for injury and illness in SIC 2851 with rates in similar industries (industrial inorganic chemicals; soaps, detergents, perfumes, and cosmetics; and industrial organic chemicals), in all private-sector industries combined, and in all manufacturing industries. It also summarizes additional BLS data to indicate the number of accidents in the paint and allied coating products industry for the following categories: source of injury/illness, type of accident/exposure, nature of injury/illness, and part of body affected. Further analysis of the BLS data for this industry cross-tabulates the type of accident, nature of injury, and body part affected with 38 sources of injury (e.g., boxes, barrels, containers, packages, working surfaces, chemicals, etc.) and with 15 occupational groupings (e.g., laborers, mixing operatives, machine operatives, etc.).

The occupational hazards in this industry fall into three major categories: accidents, fires and explosions, and exposures to toxic substances. NIOSH recommends methods to protect workers by preventing and controlling these hazards. The document also lists permissible exposure limits of the Occupational Safety and Health Administration (OSHA), recommended exposure limits of NIOSH, and the pertinent health effects for many chemicals used in the manufacture of paint and allied coating products.

Order Document No. PB85-178978 from the National Technical Information Service, Springfield, Virginia 22161. Cost: $14.50 paper, $4.50 microfiche.

*The development of criteria documents by NIOSH is a responsibility mandated by the Occupational Safety and Health Act of 1970. These documents are used to recommend standards for promulgation by the Department of Labor.

Paint, Cadmium, and Monohalomethanes -- Continued

Cadmium: On September 27, 1984, NIOSH released *Current Intelligence Bulletin #42: Cadmium (Cd).* Cadmium occurs primarily as cadmium sulfide in ores containing zinc, lead, and copper. Cadmium volatilizes readily during smelting and then condenses to form fine airborne particles that react almost immediately with oxygen to form respirable cadmium oxide fume. Potential worker exposure to cadmium occurs from ore smelting operations, the mist above cadmium-containing electroplating baths, calcination (drying) of cadmium pigments, and powdered cadmium oxide in the production of cadmium soaps used to stabilize plastics.

NIOSH reports that approximately 4,000 metric tons of cadmium are used yearly in the United States. About half of this is used for plating other metals, and the rest is used in pigments, batteries, stabilizers for plastics, metallurgy, nuclear reactor neutron-absorbing rods, and semiconductors and as a catalyst. Approximately 1.5 million workers may be potentially exposed to cadmium.

NIOSH recommends that cadmium and its compounds be regarded as potential occupational carcinogens and that appropriate controls be used to reduce worker exposure. These recommendations are based on (1) a recent epidemiologic study that demonstrated a statistically significant excess of lung-cancer mortality among workers exposed to cadmium oxide and (2) a study on chronic-inhalation exposure with rats, which provides toxicologic evidence that exposure to cadmium chloride aerosol can cause a dose-dependent incidence of malignant lung tumors. As prudent public health policy, NIOSH urges employers to assess the conditions under which their workers may be exposed to cadmium and to take all reasonable precautions to reduce these exposures to the fullest extent feasible.

Copies are available without charge from Publications Dissemination, Division of Standards Development and Technology Transfer (DSDTT); National Institute for Occupational Safety and Health; 4676 Columbia Parkway; Cincinnati, Ohio 45226.

Monohalomethanes: On September 27, 1984, NIOSH released *Current Intelligence Bulletin #43: Monohalomethanes: Methyl Chloride (CH_3Cl), Methyl Bromide (CH_3Br), Methyl Iodide CH_3I.* Commercially, these monohalomethanes have been used as methylating agents, laboratory reagents, refrigerants, aerosol propellants, pesticides, fumigants, fire-extinguishing agents, anesthetics, degreasers, blowing agents for plastic foams, and chemical intermediates. Possible exposures may occur during the production of these monohalomethanes from leaks in connecting or flexible joints, pump seals, sight glasses, and quality-control sampling sites. NIOSH estimates that approximately 146,000 U.S. workers are potentially exposed to these compounds.

NIOSH recommends that methyl chloride, methyl bromide, and methyl iodide be considered potential occupational carcinogens and that methyl chloride be considered a potential occupational teratogen. Because these monohalomethanes are alkylating agents, there is concern about their potential for inducing mutations and cancer. All three compounds were found to be direct-acting mutagens in the Ames assay. Experimental studies using various routes of administration in either rats or mice showed that these three compounds have the ability to produce cancer. Methyl chloride produced a teratogenic effect (heart defects) in the offspring of pregnant mice exposed by inhalation at 500 and 750 parts per million. As prudent public health policy, NIOSH recommends that employers assess the conditions under which workers may be exposed to these monohalomethanes and take all reasonable precautions to reduce exposures to the fullest extent feasible.

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†NIOSH issues *Current Intelligence Bulletins* (CIB's) to disseminate new scientific information about occupational hazards. A CIB may draw attention to a hazard previously unrecognized or may report new data suggesting that a known hazard is either more or less dangerous than was previously thought.

Paint, Cadmium, and Monohalomethanes — Continued

The strains of animals used, the doses and routes selected for administration of test compounds, and the lack of a coordinated study to test these compounds as a class impose limitations on the interpretation of these studies. However, NIOSH has determined that the collective results of these studies are sufficient to indicate the carcinogenic potential of these substances.

The document presents guidelines for minimizing worker exposure to these monohalomethanes, including procedures and equipment for controlling exposure and recommendations for medical surveillance and monitoring exposure.

Copies are available without charge from Publications Dissemination, DSDTT; National Institute for Occupational Safety and Health; 4676 Columbia Parkway; Cincinnati, Ohio 45226.

Reported by Div of Standards Development and Technology Transfer, National Institute for Occupational Safety and Health, CDC.

TABLE I. Summary—cases of specified notifiable diseases, United States

Disease	28th Week Ending			Cumulative, 28th Week Ending		
	July 13, 1985	July 14, 1984	Median 1980-1984	July 13, 1985	July 14, 1984	Median 1980-1984
Acquired Immunodeficiency Syndrome (AIDS)	203	76	N	3,981	2,099	N
Aseptic meningitis	217	122	193	2,509	2,483	2,515
Encephalitis: Primary (arthropod-borne & unspec.)	25	23	39	484	457	485
Post-infectious	2	4	1	72	75	55
Gonorrhea: Civilian	14,908	14,507	18,006	431,472	427,303	500,343
Military	229	554	388	9,658	11,161	14,342
Hepatitis: Type A	410	273	361	11,341	10,963	11,897
Type B	479	412	412	13,376	13,257	11,244
Non A, Non B	68	62	N	2,184	2,032	N
Unspecified	108	62	155	3,018	2,558	4,519
Legionellosis	17	15	N	297	298	N
Leprosy	8	4	6	199	127	127
Malaria	43	25	34	459	448	539
Measles: Total*	79	85	33	1,988	1,994	1,994
Indigenous	77	82	N	1,612	1,789	N
Imported	2	3	N	376	205	N
Meningococcal infections: Total	40	46	45	1,472	1,740	1,760
Civilian	40	46	44	1,469	1,737	1,745
Military	-	-	-	3	3	11
Mumps	19	20	36	1,955	1,965	2,883
Pertussis	56	36	29	857	1,086	628
Rubella (German measles)	13	13	24	401	438	1,536
Syphilis (Primary & Secondary): Civilian	467	400	495	13,264	14,788	15,929
Military	1	4	4	92	180	198
Toxic Shock syndrome	8	7	N	207	269	N
Tuberculosis	388	391	499	11,031	11,203	13,484
Tularemia	5	9	9	85	127	110
Typhoid fever	4	3	11	162	165	209
Typhus fever, tick-borne (RMSF)	30	27	54	276	379	479
Rabies, animal	66	68	107	2,685	2,701	3,505

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1985		Cum. 1985
Anthrax	-	Leptospirosis (Tex. 1)	15
Botulism: Foodborne	14	Plague	5
Infant	23	Poliomyelitis: Total	3
Other	-	Paralytic	3
Brucellosis (Tex. 3)	60	Psittacosis (N.Y. City 1)	64
Cholera	-	Rabies, human	-
Congenital rubella syndrome	-	Tetanus	29
Congenital syphilis, ages < 1 year	74	Trichinosis (Mo. 1, Fla. 1)	40
Diphtheria	1	Typhus fever, flea-borne (endemic, murine)	6

*Two of the 79 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending July 13, 1985 and July 14, 1984 (28th Week)

Reporting Area	AIDS	Aseptic Menin-gitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel-losis	Leprosy
			Primary	Post-in-fectious			A	B	NA,NB	Unspeci-fied		
	Cum. 1985	1985	Cum. 1985	Cum. 1985	Cum. 1985	Cum. 1984	1985	1985	1985	1985	1985	Cum. 1985
UNITED STATES	3,981	217	484	72	431,472	427,303	410	479	68	108	17	199
NEW ENGLAND	140	10	13	-	12,473	11,966	8	40	2	8	-	4
Maine	5	-	-	-	542	492	1	3	-	-	-	-
N.H.	-	-	4	-	276	353	-	-	-	-	-	-
Vt.	1	-	-	-	153	200	3	-	-	-	-	-
Mass.	85	4	8	-	4,683	4,723	3	28	-	8	-	4
R.I.	6	3	-	-	950	814	-	1	-	-	-	-
Conn.	43	3	1	-	5,869	5,384	1	8	2	-	-	-
MID ATLANTIC	1,589	30	72	5	65,873	58,555	41	46	3	11	-	15
Upstate N.Y.	191	8	25	4	8,518	8,771	12	13	2	6	-	-
N.Y. City	1,066	-	7	-	33,483	24,627	1	3	-	-	-	15
N.J.	240	22	17	-	10,406	9,947	8	16	-	3	-	-
Pa.	92	-	23	1	13,466	15,210	20	14	1	2	-	-
E.N. CENTRAL	164	17	104	15	60,277	58,672	16	37	3	4	7	20
Ohio	33	6	42	4	14,927	14,788	7	9	2	2	2	2
Ind.	11	3	14	2	6,185	6,734	2	5	1	-	5	-
Ill.	80	-	14	6	16,637	14,180	1	-	-	-	-	16
Mich.	27	8	27	-	16,977	16,302	6	23	-	2	-	2
Wis.	13	-	7	3	5,551	6,668	-	-	-	-	-	-
W.N. CENTRAL	43	9	31	3	21,039	20,408	11	15	3	1	2	-
Minn.	10	1	15	1	3,000	3,018	1	1	-	-	-	-
Iowa	6	1	10	-	2,279	2,288	2	1	-	-	-	-
Mo.	20	4	-	-	10,135	9,859	-	9	1	-	-	-
N. Dak.	-	-	-	1	144	193	-	-	-	-	-	-
S. Dak.	-	1	-	-	395	520	4	-	1	-	1	-
Nebr.	2	-	1	-	1,800	1,320	3	-	-	-	-	-
Kans.	5	2	5	1	3,286	3,210	1	4	1	1	1	-
S. ATLANTIC	581	40	61	24	94,003	108,549	20	93	10	5	5	5
Del.	7	1	1	-	2,100	1,959	1	-	-	-	2	-
Md.	67	2	17	1	15,001	12,094	-	14	1	1	2	1
D.C.	74	-	-	-	7,815	7,891	-	-	-	-	-	-
Va.	33	6	14	4	9,754	10,297	-	10	1	-	-	-
W. Va.	4	1	6	-	1,321	1,297	1	5	-	-	1	-
N.C.	31	5	20	-	17,588	17,089	1	9	1	-	-	2
S.C.	7	1	3	-	11,712	10,689	-	11	-	-	-	-
Ga.	96	6	-	-	-	20,864	1	9	-	1	-	1
Fla.	262	18	-	19	28,712	26,369	16	35	7	3	-	1
E.S. CENTRAL	44	15	22	4	37,139	36,906	7	33	2	1	-	-
Ky.	12	2	8	-	4,188	4,486	4	9	-	-	-	-
Tenn.	14	4	4	-	14,905	15,328	2	9	1	-	-	-
Ala.	16	7	8	4	11,418	11,797	1	11	1	1	-	-
Miss.	2	2	2	-	6,628	5,295	-	4	-	-	-	-
W.S. CENTRAL	288	51	60	2	58,428	58,228	60	53	5	29	1	14
Ark.	4	1	1	1	5,587	5,237	1	1	-	-	-	1
La.	54	2	2	-	12,322	13,209	2	7	-	-	-	1
Okla.	5	-	16	1	6,112	6,343	1	1	-	1	1	-
Tex.	225	48	41	-	34,407	33,439	56	44	5	28	-	12
MOUNTAIN	62	6	19	3	14,080	13,719	51	35	11	6	1	5
Mont.	-	-	-	-	386	578	-	-	-	1	-	-
Idaho	-	-	-	-	440	663	5	-	-	-	-	-
Wyo.	-	-	1	-	363	402	-	-	-	-	-	-
Colo.	25	3	6	-	4,284	3,979	5	4	1	4	-	1
N. Mex.	6	-	1	-	1,585	1,541	13	9	1	-	1	-
Ariz.	23	2	2	-	4,122	3,746	17	14	7	1	-	1
Utah	5	1	7	3	593	667	9	3	2	-	-	2
Nev.	3	-	2	-	2,307	2,143	2	5	-	-	-	1
PACIFIC	1,070	39	102	16	68,160	60,300	196	127	29	43	1	136
Wash.	59	1	11	-	4,756	4,278	11	12	2	3	-	28
Oreg.	16	-	-	-	3,309	3,386	35	11	3	-	-	2
Calif.	975	34	88	16	57,567	50,126	149	104	24	40	1	92
Alaska	2	-	3	-	1,550	1,502	-	-	-	-	-	-
Hawaii	18	4	-	-	978	1,008	1	-	-	-	-	14
Guam	-	U	-	-	73	136	U	U	U	U	U	1
P.R.	45	9	4	2	1,931	1,835	-	-	-	1	-	2
V.I.	2	-	-	-	267	275	1	1	-	1	-	-
Pac. Trust Terr.	-	U	-	-	146	-	U	U	U	U	U	20

N: Not notifiable U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 13, 1985 and July 14, 1984 (28th Week)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum. 1985	1985	Cum. 1985	1985	Cum. 1985	Cum. 1984	Cum. 1985	1985	Cum. 1985	1985	Cum. 1985	Cum. 1984	1985	Cum. 1985	Cum. 1984
UNITED STATES	459	77	1,612	2	376	1,994	1,472	19	1,955	56	857	1,086	13	401	438
NEW ENGLAND	26	-	33	-	86	102	66	-	40	2	45	26	-	9	17
Maine	3	-	-	-	-	-	2	-	6	-	2	-	-	-	1
N.H.	4	-	-	-	-	36	7	-	7	-	23	6	-	2	-
Vt.	-	-	-	-	-	6	8	-	2	-	2	14	-	-	-
Mass.	12	-	29	-	83	47	12	-	13	2	8	5	-	6	16
R.I.	2	-	-	-	-	-	12	-	7	-	5	1	-	-	-
Conn.	5	-	4	-	3	13	25	-	5	-	5	-	-	1	-
MID ATLANTIC	63	3	145	-	27	116	244	2	212	2	64	93	2	157	145
Upstate N.Y.	22	2	70	-	11	25	105	2	122	1	30	54	2	16	94
N.Y. City	18	-	40	-	7	81	30	-	14	-	9	3	-	120	35
N.J.	6	1	12	-	9	6	37	-	26	1	3	7	-	9	15
Pa.	17	-	23	-	-	4	72	-	50	-	22	29	-	12	1
E.N. CENTRAL	20	4	288	-	125	641	264	5	755	2	96	292	-	20	73
Ohio	4	-	-	-	43	7	89	2	229	-	21	51	-	-	2
Ind.	3	-	-	-	1	3	36	-	33	-	11	195	-	-	2
Ill.	1	4	197	-	66	162	57	1	148	2	15	19	-	5	43
Mich.	11	-	37	-	15	438	56	2	279	-	21	13	-	14	18
Wis.	1	-	54	-	-	31	26	-	66	-	28	14	-	1	8
W.N. CENTRAL	14	-	1	-	8	9	82	-	62	1	67	82	1	20	29
Minn.	6	-	-	-	4	3	19	-	1	1	16	9	1	3	2
Iowa	1	-	-	-	-	-	7	-	8	-	4	4	-	1	1
Mo.	2	-	-	-	2	2	34	-	11	-	12	14	-	7	-
N. Dak.	1	-	-	-	2	-	3	-	2	-	8	-	-	2	3
S. Dak.	1	-	-	-	-	-	2	-	-	-	1	5	-	-	-
Nebr.	1	-	-	-	-	-	7	-	2	-	4	2	-	-	-
Kans.	2	-	1	-	-	4	10	-	38	-	22	48	-	7	23
S. ATLANTIC	59	7	212	-	6	28	287	-	167	11	186	102	5	48	20
Del.	-	-	-	-	-	-	7	-	1	-	-	2	-	1	-
Md.	15	3	51	-	4	9	39	-	25	7	83	23	2	3	1
D.C.	4	-	2	-	1	5	6	-	-	-	-	-	-	-	-
Va.	11	3	21	-	1	2	37	-	29	-	5	12	-	2	-
W. Va.	1	-	31	-	-	-	6	-	54	-	1	7	2	11	-
N.C.	6	-	9	-	-	-	38	-	9	-	9	17	-	-	-
S.C.	-	-	-	-	-	1	29	-	7	-	-	2	-	3	-
Ga.	4	-	8	-	-	-	51	-	13	1	50	9	-	4	2
Fla.	18	1	90	-	-	11	74	-	29	3	38	30	1	24	17
E.S. CENTRAL	7	-	-	-	1	3	64	-	17	1	13	6	-	2	7
Ky.	2	-	-	-	-	1	5	-	4	-	3	1	-	2	3
Tenn.	-	-	-	-	-	2	22	-	11	-	5	2	-	-	-
Ala.	4	-	-	-	-	-	22	-	-	1	3	-	-	-	1
Miss.	1	-	-	-	1	-	15	-	2	-	2	3	-	-	3
W.S. CENTRAL	41	45	340	-	8	448	127	4	208	14	138	231	4	26	6
Ark.	-	-	-	-	-	4	12	-	4	-	10	14	-	1	3
La.	-	-	34	-	-	-	21	-	2	-	5	3	-	-	-
Okla.	2	-	-	-	-	7	25	N	N	-	70	205	-	1	-
Tex.	39	45	306	-	8	437	69	4	202	14	51	9	4	24	3
MOUNTAIN	27	8	441	-	43	138	65	2	194	3	46	74	-	4	13
Mont.	-	-	122	-	17	-	4	-	7	-	3	17	-	-	-
Idaho	1	3	117	-	18	23	2	-	7	-	-	3	-	1	1
Wyo.	1	-	-	-	-	-	5	-	2	-	-	3	-	-	2
Colo.	8	-	-	-	6	-	18	-	16	3	16	26	-	-	2
N. Mex.	9	-	1	-	2	88	8	N	N	-	5	5	-	2	-
Ariz.	4	5	201	-	-	-	19	2	95	-	13	13	-	1	-
Utah	2	-	-	-	-	27	7	-	5	-	9	5	-	-	7
Nev.	2	-	-	-	-	-	2	-	62	-	-	2	-	-	1
PACIFIC	202	10	152	2	72	509	273	6	300	20	204	180	1	115	128
Wash.	14	4	9	2†	32	108	48	-	26	-	27	35	-	11	1
Oreg.	8	-	3	-	-	-	25	N	N	-	21	11	-	2	-
Calif.	163	6	127	-	35	267	189	6	260	8	130	65	-	67	123
Alaska	2	-	-	-	-	-	7	-	3	12	23	-	-	1	1
Hawaii	15	-	13	-	5	134	4	-	11	-	3	69	1	34	3
Guam	1	U	10	U	-	90	-	U	4	U	-	-	U	1	4
P.R.	-	-	48	-	-	1	9	1	113	-	5	-	-	22	6
V.I.	-	-	4	-	6	-	-	-	3	-	-	-	-	-	-
Pac. Trust Terr.	-	U	-	U	-	-	-	U	3	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 13, 1985 and July 14, 1984 (28th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1985	Cum. 1984	1985	Cum. 1985	Cum. 1984	Cum. 1985	Cum. 1985	Cum. 1985	Cum. 1985
UNITED STATES	13,264	14,788	8	11,031	11,203	65	162	276	2,685
NEW ENGLAND	284	291	-	367	314	-	7	3	9
Maine	8	3	-	27	17	-	-	-	-
N.H.	6	6	-	10	19	-	-	-	1
Vt.	3	1	-	4	6	-	-	-	-
Mass.	152	172	-	222	167	-	6	3	5
R.I.	7	11	-	32	25	-	-	-	-
Conn.	108	98	-	72	80	-	1	-	3
MID ATLANTIC	1,825	2,037	-	2,001	2,039	1	20	6	210
Upstate N.Y.	122	164	-	338	333	-	7	4	54
N.Y. City	1,133	1,255	-	1,014	826	1	7	-	-
N.J.	368	369	-	241	445	-	5	-	13
Pa.	202	249	-	408	435	-	1	2	143
E.N. CENTRAL	605	675	1	1,329	1,442	-	17	23	86
Ohio	78	131	-	230	284	-	3	19	17
Ind.	61	74	1	165	167	-	3	2	12
Ill.	311	216	-	578	603	-	4	-	15
Mich.	121	210	-	286	295	-	5	2	11
Wis.	34	44	-	70	93	-	2	-	31
W.N. CENTRAL	128	226	-	295	330	22	8	22	498
Minn.	28	67	-	59	58	1	5	-	89
Iowa	14	10	-	41	34	-	1	-	98
Mo.	62	116	-	137	161	17	1	1	22
N. Dak.	2	4	-	3	8	-	-	1	64
S. Dak.	4	-	-	15	13	3	-	1	169
Nebr.	5	10	-	11	17	1	1	2	24
Kans.	13	19	-	29	39	-	-	17	32
S. ATLANTIC	3,256	4,408	1	2,280	2,326	6	18	118	736
Del.	17	12	-	23	28	1	-	1	-
Md.	205	273	-	208	249	-	5	10	370
D.C.	195	174	-	98	88	-	-	-	-
Va.	167	227	-	206	227	1	3	11	97
W. Va.	9	11	1	59	76	-	-	1	17
N.C.	352	437	-	271	348	4	2	47	4
S.C.	413	406	-	303	279	-	-	34	43
Ga.	-	751	-	357	322	-	-	10	111
Fla.	1,898	2,117	-	755	709	-	8	4	94
E.S. CENTRAL	1,084	971	-	976	1,047	3	4	28	132
Ky.	35	55	-	214	236	-	1	1	21
Tenn.	307	274	-	303	338	3	1	17	28
Ala.	328	313	-	309	314	-	2	5	81
Miss.	414	329	-	150	159	-	-	5	2
W.S. CENTRAL	3,278	3,552	3	1,325	1,291	20	11	61	512
Ark.	171	106	-	142	142	8	-	7	85
La.	577	649	-	195	165	-	-	-	11
Okla.	93	121	-	152	123	8	-	45	61
Tex.	2,437	2,676	3	836	861	4	11	9	355
MOUNTAIN	397	333	2	286	282	11	7	13	217
Mont.	2	2	-	34	14	2	-	6	110
Idaho	3	14	-	14	17	-	-	1	2
Wyo.	5	6	-	5	-	-	-	4	12
Colo.	93	78	-	30	28	2	4	1	9
N. Mex.	63	42	1	55	56	2	2	-	3
Ariz.	205	131	-	122	133	3	1	-	79
Utah	5	11	1	6	19	2	-	-	-
Nev.	21	49	-	20	15	-	-	1	2
PACIFIC	2,407	2,295	1	2,172	2,132	2	70	2	285
Wash.	65	77	1	124	108	-	-	-	4
Oreg.	47	70	-	74	85	1	-	-	1
Calif.	2,250	2,104	-	1,802	1,789	1	67	2	277
Alaska	2	3	-	67	33	-	-	-	3
Hawaii	43	41	-	105	117	-	3	-	-
Guam	2	-	U	16	31	-	-	-	-
P.R.	437	459	-	185	217	-	1	-	22
V.I.	1	8	-	1	3	-	52	-	-
Pac. Trust Terr.	13	-	U	16	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending July 13, 1985 (28th Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	561	465	125	42	15	14	46
Boston, Mass.	190	115	46	18	3	8	18
Bridgeport, Conn.	45	32	7	3	1	2	2
Cambridge, Mass.	39	32	4	1	1	1	5
Fall River, Mass.	23	15	8	-	-	-	-
Hartford, Conn.	61	38	9	7	5	2	4
Lowell, Mass.	20	17	3	-	-	-	1
Lynn, Mass.	20	15	4	1	-	-	-
New Bedford, Mass.	23	20	3	-	-	-	-
New Haven, Conn.	54	36	11	5	1	1	1
Providence, R.I.	50	34	13	1	2	-	4
Somerville, Mass.	9	8	-	1	-	-	-
Springfield, Mass.	42	35	6	1	-	-	5
Waterbury, Conn.	30	26	3	1	-	-	1
Worcester, Mass.	55	42	8	3	2	-	5
MID ATLANTIC	2,990	1,910	620	236	65	58	119
Albany, N.Y.	65	48	12	4	1	-	2
Allentown, Pa.	12	10	2	-	-	-	-
Buffalo, N.Y.	132	92	28	6	5	1	13
Camden, N.J.	56	31	17	4	1	3	2
Elizabeth, N.J.	29	18	8	3	-	-	3
Erie, Pa.†	35	23	8	-	3	1	1
Jersey City, N.J.	51	33	12	-	3	3	-
N.Y. City, N.Y.	1,558	984	343	164	39	28	53
Newark, N.J.	66	36	22	3	2	3	6
Paterson, N.J.	33	17	8	3	1	4	3
Philadelphia, Pa.	391	264	86	25	8	8	20
Pittsburgh, Pa.†	60	40	18	1	-	1	-
Reading, Pa.	30	25	2	2	-	1	1
Rochester, N.Y.	127	106	13	5	-	2	6
Schenectady, N.Y.	27	18	6	3	-	-	2
Scranton, Pa.†	29	25	4	-	-	-	-
Syracuse, N.Y.	101	81	8	7	2	3	2
Trenton, N.J.	30	16	10	4	-	-	2
Utica, N.Y.	19	15	4	-	-	-	1
Yonkers, N.Y.	39	28	9	2	-	-	2
E.N. CENTRAL	2,335	1,588	427	145	62	112	115
Akron, Ohio	43	26	10	3	1	3	-
Canton, Ohio	37	27	5	2	2	1	4
Chicago, Ill.§	553	462	11	26	16	37	16
Cincinnati, Ohio	164	98	38	12	4	12	16
Cleveland, Ohio	197	118	46	15	7	11	11
Columbus, Ohio	87	54	25	4	2	2	1
Dayton, Ohio	112	73	26	3	4	4	3
Detroit, Mich.	278	158	70	32	2	16	8
Evansville, Ind.	64	47	15	-	1	1	1
Fort Wayne, Ind.	61	40	17	2	2	-	3
Gary, Ind.	20	12	3	5	-	-	4
Grand Rapids, Mich.	35	27	3	2	1	2	1
Indianapolis, Ind.	188	108	57	12	5	6	4
Madison, Wis.	46	29	6	6	2	3	7
Milwaukee, Wis.	152	104	34	2	7	5	9
Peoria, Ill.	43	27	12	1	2	5	1
Rockford, Ill.	43	34	4	4	-	1	1
South Bend, Ind.	61	45	8	4	1	3	8
Toledo, Ohio	104	63	28	7	3	3	10
Youngstown, Ohio	47	36	7	3	1	-	3
W.N. CENTRAL	764	524	148	44	18	30	34
Des Moines, Iowa	65	48	10	2	1	4	2
Duluth, Minn.	30	19	5	3	2	1	2
Kansas City, Kans.	54	33	14	2	3	2	3
Kansas City, Mo.	101	60	27	8	1	5	9
Lincoln, Nebr.	41	30	8	2	-	1	1
Minneapolis, Minn.	90	66	14	4	2	4	2
Omaha, Nebr.	84	58	18	4	1	3	5
St. Louis, Mo.	169	124	24	12	2	7	4
St. Paul, Minn.	63	46	10	3	4	-	1
Wichita, Kans.	67	40	18	4	2	3	5

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
S. ATLANTIC	1,054	625	260	91	42	35	42
Atlanta, Ga.	155	97	34	14	7	3	4
Baltimore, Md.	203	110	51	32	8	2	5
Charlotte, N.C.	76	48	17	8	2	1	5
Jacksonville, Fla.	99	55	33	4	4	3	1
Miami, Fla.	33	19	8	3	2	1	-
Norfolk, Va.	51	26	11	4	4	6	2
Richmond, Va.	85	42	31	3	5	4	8
Savannah, Ga.	38	18	10	5	2	3	1
St. Petersburg, Fla.	119	98	12	5	2	2	7
Tampa, Fla.	85	43	13	3	2	3	1
Washington, D.C.	108	57	33	8	4	6	4
Wilmington, Del.	22	12	7	2	-	1	-
E.S. CENTRAL	708	448	148	47	37	28	38
Birmingham, Ala.	124	75	26	8	6	7	3
Chattanooga, Tenn.	62	48	10	-	3	1	6
Knoxville, Tenn.	54	34	12	3	3	2	4
Louisville, Ky.	88	60	18	3	7	-	3
Memphis, Tenn.	150	90	34	5	7	14	14
Mobile, Ala.	67	33	16	15	2	1	1
Montgomery, Ala.	42	29	6	2	4	1	-
Nashville, Tenn.	121	79	24	11	5	2	7
W.S. CENTRAL	1,237	743	283	97	66	48	67
Austin, Tex.	60	40	7	5	7	1	8
Baton Rouge, La.	46	30	10	1	3	2	-
Corpus Christi, Tex.	39	16	11	5	4	3	1
Dallas, Tex.	177	96	43	23	11	4	7
El Paso, Tex.	54	26	16	6	4	2	1
Fort Worth, Tex.	82	45	17	7	5	8	9
Houston, Tex.	177	101	47	15	10	4	2
Little Rock, Ark.	99	68	20	2	2	7	12
New Orleans, La.	138	91	38	5	3	1	-
San Antonio, Tex.	185	106	47	12	10	10	11
Shreveport, La.	67	47	11	6	3	-	4
Tulsa, Okla.	113	77	16	10	4	6	12
MOUNTAIN	661	405	145	48	45	18	36
Albuquerque, N.Mex.	91	55	20	7	8	1	5
Colo. Springs, Colo.	39	25	6	4	3	1	3
Denver, Colo.	108	68	21	10	7	2	2
Las Vegas, Nev.	78	45	20	6	3	4	3
Ogden, Utah	33	23	5	2	1	2	4
Phoenix, Ariz.	130	71	34	10	11	4	2
Pueblo, Colo.	16	12	3	-	1	-	3
Salt Lake City, Utah	52	31	10	5	5	1	1
Tucson, Ariz.	114	75	26	4	6	3	13
PACIFIC	1,826	1,171	368	168	71	41	108
Berkeley, Calif.	18	15	2	-	1	-	1
Fresno, Calif.	78	49	14	5	6	4	7
Glendale, Calif.	30	26	2	2	-	-	2
Honolulu, Hawaii	81	56	16	5	1	3	7
Long Beach, Calif.	76	50	19	4	1	2	10
Los Angeles, Calif.	421	263	82	48	20	4	11
Oakland, Calif.	85	51	19	7	5	3	4
Pasadena, Calif.	38	26	7	2	2	1	3
Portland, Oreg.	91	67	11	7	3	3	2
Sacramento, Calif.	148	91	30	17	5	3	8
San Diego, Calif.	151	91	34	15	6	2	20
San Francisco, Calif.	149	85	32	22	5	5	4
San Jose, Calif.	179	116	32	17	8	6	12
Seattle, Wash.	133	77	38	8	7	3	3
Spokane, Wash.	56	42	10	2	1	1	9
Tacoma, Wash.	94	66	20	7	-	1	5
TOTAL	12,136††	7,879	2,524	918	421	384	685

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
** Pneumonia and influenza.
† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
†† Total includes unknown ages.
§ Data not available. Figures are estimates based on average of past 4 weeks.

TABLE V. Years of potential life lost, deaths, and death rates, by cause of death, and estimated number of physician contacts, by principal diagnosis, United States

Cause of morbidity or mortality (Ninth Revision ICD, 1975)	Years of potential life lost before age 65 by persons dying in 1983*†	Estimated mortality February 1985		Estimated number of physician contacts February 1985*¶
		Number*§	Annual Rate/100,000*§	
ALL CAUSES (TOTAL)	9,170,000	185,820	1,019.9	106,100,000
Accidents and adverse effects (E800-E949)	2,219,000	6,490	35.6	5,400,000
Malignant neoplasms (140-208)	1,808,000	35,800	196.5	1,600,000
Diseases of heart (390-398, 402, 404-429)	1,559,000	70,290	385.8	5,000,000
Suicides, homicides (E950-E978)	1,218,000	3,530	19.4	—
Chronic liver disease and cirrhosis (571)	248,000	2,330	12.8	100,000
Cerebrovascular diseases (430-438)	226,000	14,540	79.8	600,000
Congenital anomalies (740-759)	134,000	1,110	6.1	400,000
Chronic obstructive pulmonary diseases and allied conditions (490-496)	123,000	7,930	43.5	2,600,000
Diabetes mellitus (250)	115,000	3,410	18.7	2,800,000
Pneumonia and influenza (480-487)	106,000	9,110	50.0	3,100,000
Prenatal care*				2,800,000
Infant mortality*††		3,200	11.3 /1,000 live births	

*For details of calculation, see footnotes for Table V, *MMWR* 1985;34:2.

†Years of potential life lost for persons between 1 year and 65 years old at the time of death are derived from the number of deaths in each age category as reported by the National Center for Health Statistics, *Monthly Vital Statistics Report* (MVSR), Vol. 32, No. 13, September 21, 1984.

§National Center for Health Statistics, *Monthly Vital Statistics Report* (MVSR), Vol. 34, No. 3, June 21, 1985, pp. 8-9.

¶IMS America *National Disease and Therapeutic Index* (NDTI), Monthly Report, February 1985, Section III.

††MVSR Vol. 34, No. 2, May 28, 1985, p. 1.

Erratum: Vol. 34, No. 27

p. 407-408. In the Recommendation of the Immunization Practices Advisory Committee (ACIP), "Diphtheria, Tetanus, and Pertussis: Guidelines for Vaccine Prophylaxis and Other Preventive Measures," the following changes should be noted: Diphtheria and Tetanus Toxoids Adsorbed (For Pediatric Use) (DT) is available from several manufacturers. Diphtheria Toxoid Adsorbed (D) is distributed by Sclavo, Inc.

Influenza — United States, 1984-1985 Season

Influenza type A (H3N2) viruses were isolated in every state during the 1984-1985 season and were associated with the highest ratio of pneumonia and influenza deaths (as a percentage of total deaths) since 1976. Low levels of influenza B activity occurred late in the season, and influenza A(H1N1) virus was reported rarely.

National data on influenza activity for the 1984-1985 season were obtained from four major sources: (1) weekly reports of the number of respiratory specimens tested and the number and types of influenza virus isolates identified by 61 collaborating state, county, city, or military laboratories; (2) weekly reports of mortality from 121 cities, including deaths associated with pneumonia and influenza (P&I), an index that has historically reflected seasonal mortality attributable to influenza; (3) weekly semiquantitative estimates from each state health department of the extent of influenza-like morbidity indicated by its statewide surveillance system; and (4) weekly returns from approximately 125 physician members of the American Academy of Family Physicians Research Panel, who recorded the number of patients seen in their offices with influenza-like illnesses. In addition, CDC also received spontaneous reports of unusual influenza cases and outbreaks from a variety of sources.

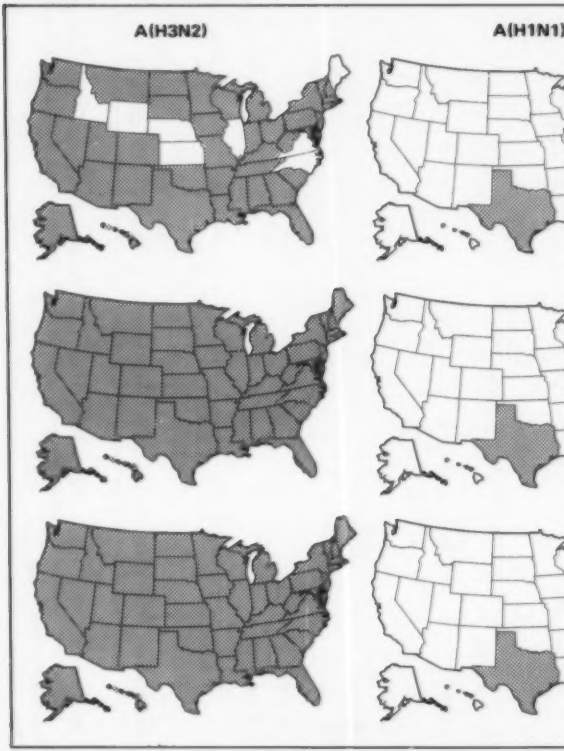
Isolates of type A(H3N2) virus were first associated with sporadic cases in Nevada in November and in the New York City area, Texas, and Wisconsin by early December. The first laboratory-documented outbreak of the season also began in early December (a kindergarten class in California), and by late December, type A(H3N2) outbreaks had been confirmed in a prison and a nursing home in New York City and in an elementary school, a college, and a Veterans Administration hospital in Illinois. By January 31, isolates of influenza type A(H3N2) had been reported from all but nine states, and by the end of the season, influenza A(H3N2) virus had been reported from every state and the District of Columbia (Figure 2). The peak of virus isolations occurred in February, in parallel with peaks in physician reports of influenza morbidity, and the highest P&I mortality ratios also occurred in February (Figure 3).

During the season, 36 states reported regional or widespread outbreaks (Figure 4), compared with 37 for the previous season. The percentage of deaths attributed to P&I reached a maximum of 7.2% in late February and early April; this was the highest percentage since 1976, when it reached 7.7%.

Approximately 2,100 isolates were reported by collaborating laboratories, close to the total for the 1983-1984 season and above the average of about 1,500 isolates for the preceding five seasons (Figure 5). Type A(H3N2) viruses predominated, accounting for 97% of the reported isolates. Type B viruses accounted for almost all the remaining 3% of viruses reported. In addition to sporadic cases, type B isolates were associated with two school outbreaks in Hawaii and an outbreak in a geriatric ward in a New York hospital during April. Only a few type A(H1N1) isolates were identified during the season, all from sporadic cases.

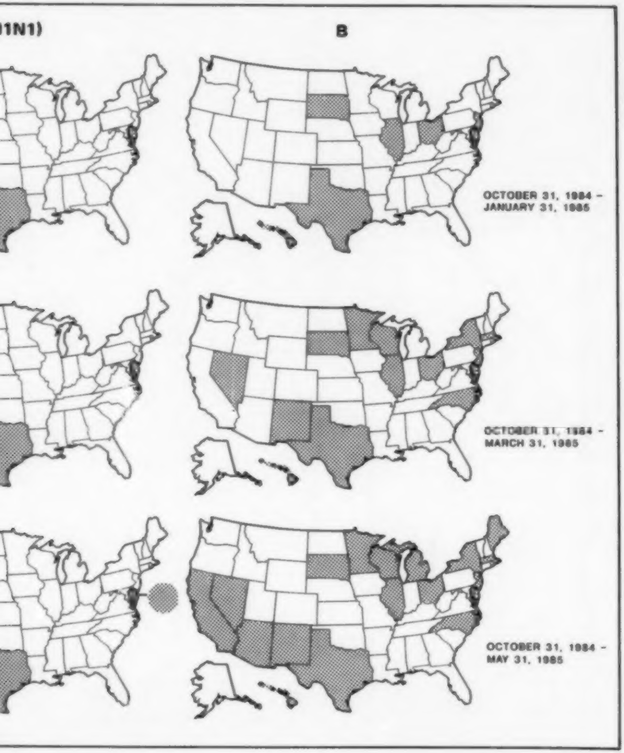
Reported by State and Territorial Epidemiologists and State Laboratory Directors; U.S. School of Aerospace Medicine, San Antonio, R Couch, MD, P Glezen MD, and H Six, PhD, Baylor College of Medicine, Houston, Brooke Army Medical Center, Fort Sam Houston, Texas; Milwaukee Health Dept Virus Laboratory, Milwaukee, Wisconsin; Allegheny County Health Laboratory, Pittsburgh, Pennsylvania; Sunrise Hospital Virology Laboratory, Las Vegas, Nevada; Montefiore Hospital and Medical Center Virus Laboratory, New York City, Nassau County Medical Center Virology Laboratory, East Meadow, Erie County Medical Center Virology Laboratory, Buffalo, University of Rochester Medical Center, Rochester, New York; Charity Hospital Virology and Rickettsial Laboratory, New Orleans, Louisiana; Mayo Clinic Virology Laboratory, Rochester, Minnesota; Veterans Administration Hospital Virus Laboratory, West Haven, Connecticut; Department of Pediatrics, University of Chicago, Illinois; University of Arizona Health Service Center Virology Laboratory, Tucson, Arizona; Letterman Army Medical Center, San Francisco, Los Angeles County Health Department Virology Laboratory, Los Angeles, California; University of Colorado Medical Center Virus Laboratory, Denver, Colorado; Participating physicians of the American Academy of Family Physicians; Statistical Svcs Br, Div of Surveillance and Epidemiologic Studies, Epidemiology Program Office, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

FIGURE 2. Cumulative summary of states with influenza virus
States, 1984-1985 season



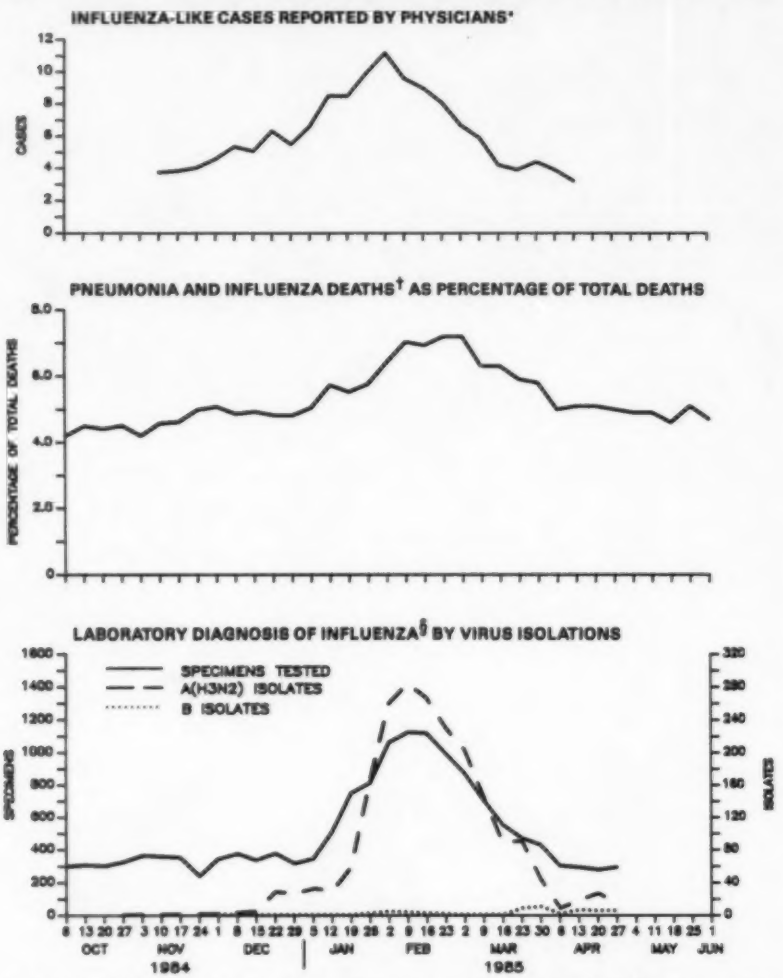
Influenza — Continued

...virus isolates reported, by date of first official notification — United



Influenza — Continued

FIGURE 3. Indicators of influenza activity, by week — United States, 1984-1985 season



*Reported to CDC by approximately 125 physician members of the American Academy of Family Physicians. A case was defined as a patient with fever 37.8 C (100 F) or greater and at least cough or sore throat.

†Reported to CDC from 121 cities in the United States. Pneumonia and influenza deaths include all deaths where pneumonia is listed as a primary or underlying cause or where influenza is listed on the death certificate.

§Reported to CDC by WHO Collaborating Laboratories (including military sources).

Influenza — Continued

FIGURE 4. Highest level of influenza morbidity reported, by state — United States, November 1984-June 1985

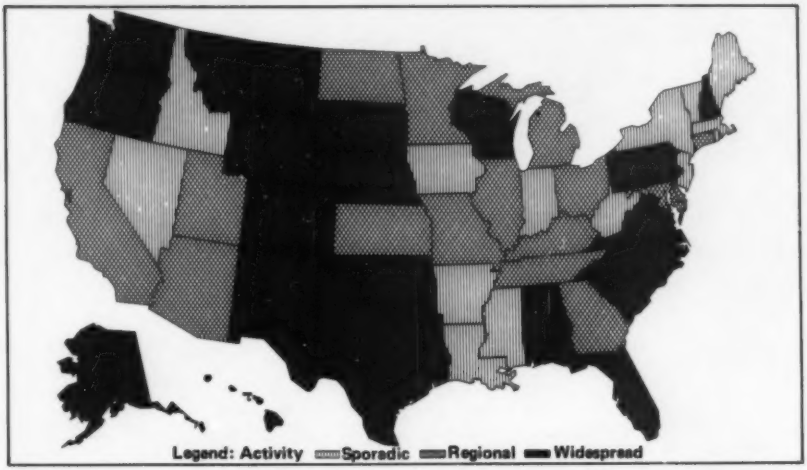


FIGURE 5. Isolation of influenza viruses reported to CDC by collaborating civilian and military laboratories — United States, 1976-1985

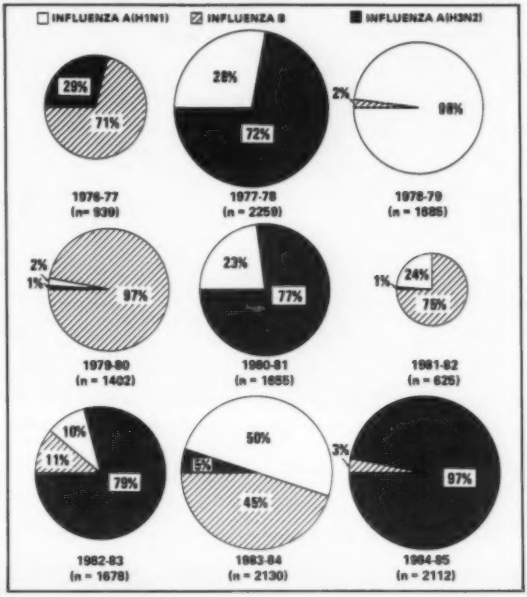
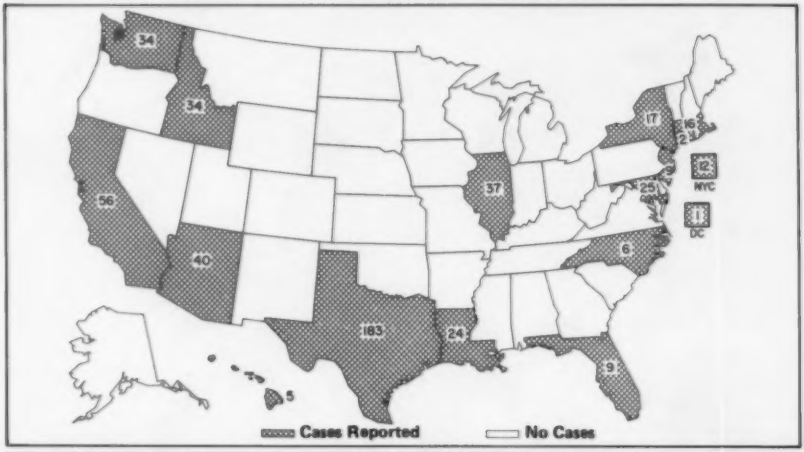


FIGURE I. Reported measles cases — United States, weeks 24-27, 1985



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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